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ABSTRACT

Increasing recent research on nontraditional students has uncovered anomalies and inconsistencies in Tinto's model of student persistence patterns, especially with regard to academic and social integration. It is hypothesized that these inconsistencies are a product of the heterogeneous nature of nontraditional student populations, combined with limited methodological approaches utilizing undifferentiated student tracking and standardized surveys. This hypothesis was tested through the use of selected case studies. A sample of 20 students was drawn from the approximately 140 respondents to a 1986-87 followup survey of a group of students placed in a Guided Studies program in the fall of 1984. Personal interviews, preceded by a questionnaire on all aspects of academic and social integration, were conducted to identify and define variables associated with student success. Findings were found to be consistent with Tinto's model and inconsistent with recent research on nontraditional students. The use of the case study approach, instead of aggregate quantitative methodology, and the focus on academically underprepared students, rather than a larger student population, are given as probable reasons for the differences. Contains 18 references. (Author/KM)

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CASE STUDIES OF NON-TRADITIONAL HIGH RISK STUDENTS: DOES SOCIAL AND ACADEMIC INTEGRATION APPLY?

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CASE STUDIES OF NON-TRADITIONAL HIGH RISK STUDENTS: DOES SOCIAL AND ACADEMIC INTEGRATION APPLY?

ABSTRACT

Based on subsequent research, Tinto's theoretical formulation has proven to be a fruitful approach in attempting to understand student persistence patterns. However, the increasing research on non-traditional students has uncovered anomalies and inconsistencies in Tinto's model, especially with regard to academic and social integration. It is our hypothesis that these inconsistencies are a product of the heterogeneous nature of non-traditional student populations, combined with limited methodological approaches utilizing undifferentiated student tracking and standardized surveys. This hypothesis is tested through the use of selected case studies from a larger quantitative study.

CASE STUDIES OF NON-TRADITIONAL HIGH RISK STUDENTS: DOES SOCIAL AND ACADEMIC INTEGRATION APPLY?

Introduction

Institutions of higher education are increasingly attempting to demonstrate a value-added approach to document student outcomes. Additional resources are being focused on assessment and development of student tracking systems. If this path to quality assurance is to be achieved without sacrificing a commitment to access, even greater efforts will be needed to assist entering and returning students who are underprepared for college. This study reports on one institution's special program for "high risk" students in an effort to better define the determinants of both student success and failure. The reported findings are based on structured interviews of a sample of students selected from a larger on-going project.

Students leave college for a variety of reasons. Many of these reasons have been identified as: lack of a specific goal, unrealistic expectations, personal, social or economic difficulties, or career uncertainty, among others (Astin, 1975; Aitken, 1982). A major problem in dealing with attrition is that it is difficult to identify until these individuals actually become an attrition statistic. High risk students (usually identified by a set of pre-determined characteristics) are of concern to many institutions primarily because, as a group, they presumably have the highest potential for leaving the institution with their educational goal unrealized, and because these characteristics seem to hover within the scope of the institution to remediate.

This paper attempts to describe one institution's approach to increasing student success and persistence among high risk students via a program entitled

"Guided Studies". It outlines the research findings relating to outcomes of the program and student perceptions regarding the determinants of both success and failure within the institution.

One traditional characteristic of high risk students is that, for whatever reason, they are academically underprepared for college level work. In the fall of 1984, the college under study implemented its Guided Studies program, which was based on the premise that early identification of students with academic deficiencies and appropriate prescriptive classes to remedy those deficiencies would prevent students from enrolling in classes where predictability of success was minimal (Japely, Kennedy, and Walleri, 1987). Students would be required to take appropriate preparatory classes before entering into other courses requiring higher skill levels. This intrusive approach would prevent students from enrolling in classes for which they were underprepared, and would offer them a chance to build necessary skills in order to succeed in subsequent course work.

Despite this intrusive program some students were still not successful, and the research provided little concrete information on why some underprepared students were successful, while others continued to fail (Walleri, 1987). To remedy this information gap, Bentler and Speckart (1981) have recommended that retention rates be examined from an attitudinal and behavioral view, particularly to determine if data collected several years after the outcome influence students perception of past experiences. Following this approach, the research reported here attempts to define, in specific and human terms, the reasons for relative success and failure of high risk students.

The institution in question is a comprehensive community college located on the periphery of a large metropolitan area, serving primarily a white, middle class, suburban population. The average age of the over 23,000 annual

unduplicated student population (approximately 5400 FTE) is 32. Only 28 percent attend full-time, 58 percent are female, and 69 percent work full or part-time. Since these demographics are different from a typical traditional college student population, investigations regarding persistence patterns using models designed for four-year institutions, with somewhat homogeneous populations, are helpful, yet suggest a need for continued, specific research targeting persistence patterns within the community college environment.

Literature Review

Tinto's (1975) theoretical model has been a helpful tool in attempting to understand student persistence. In summary form, Tinto's model specifies that students entering college bring with them a variety of attributes and background characteristics that have an impact on the expectations they hold toward the college experience. These commitments change during the student's stay in college as a result of integration into the academic and social systems of that institution. Tinto includes grades and intellectual development in the academic system, and student-to-faculty interactions in the social system. The level to which a student integrates into those systems is the primary determinant of choosing to stay and meet objectives or to drop out of the institution.

A considerable body of research, primarily quantitative, has tended to confirm Tinto's model, especially for traditional college age students at four-year institutions (Pascarella and Chapman, 1983; Terenzini, Pascarella, Theophilides, and Lorang, 1985). However, subsequent research on non-traditional student populations in general (Pascarella, Duby, and Iverson, 1983; Metzner and Bean, 1987), and community college students in particular

(Pascarella, Smart, and Ethington, 1986; Voorhees, 1987), has resulted in some variations and inconsistencies in the model. Specifically, the findings from this research suggests that student persistence is independent of, or only minimally impacted by, academic and social integration. In fact, a separate field of research has emerged based on the purported unique characteristics and attendance patterns of non-traditional students (usually defined as older, commuting and/or part-time students, in which education is not as central to their lives as for traditional full-time students).

It is our hypothesis that these inconsistencies are a product of the heterogeneous nature of non-traditional student populations combined with limited methodological approaches (i.e. undifferentiated student tracking and standardized surveys). This hypothesis is tested through the use of case studies. Kinnick, Westine, and Kempner's (1987) longitudinal analysis of baccalaureate degree completion for community college students found evidence in support of this hypothesis. Further, these latter findings were based on case studies, and were not uncovered in the quantitative analysis.

A major implication derived from Tinto's work and related research is the comprehensive nature of the variables influencing student persistence and the shift toward relationship issues: relationships between students, between students and faculty, and between students/faculty and systems. Roueche and Baker's (1987) study of the reforms at Miami-Dade Community College suggests that we can draw a relationship between the total instructional program and student performance.

Finally, a major consideration in this study is the importance of incorporating student intentions and objectives in evaluating the persistence patterns of non-traditional students (Noel, Levitz, and Saluri, 1986). This variable is crucial due to the diversity in goals of non-traditional students,

goals which may not include degree completion. Tinto's model, and much of the research, assumes that all students are intending to earn a degree, and such an assumption can result in misleading conclusions about the causes and consequences of student attrition.

The "Guided Studies" Program

The Guided Studies program is a key part of the college's comprehensive system involving testing and placement, career and academic counseling, an orientation course for new students, developmental and tutorial services, and other services for targeted populations (handicapped, returning women, etc). Further, a program based on counselor or academic advisor intervention has been initiated for students experiencing academic difficulty. Thus, Guided Studies does not exist in a vacuum but rather is part of a total college effort to promote student success.

All students who are registered for nine credit hours or more are required to take the Comparative Guidance Placement (CGP) exam; then, based on test results they are classified in regular student status (no academic deficiencies, as identifiable within the limitations of the testing tool), or in Guided Studies (deficient in one, two or three academic areas: reading, writing, and/or mathematics).

If a student scores below 41 on the reading portion of the CGP it is generally an indication that the student has difficulty reading texts written at the high school level. A score below 45 on the writing portion of the CGP suggests that the student has poor grammar and usage skills. Scoring less than 106 on Math Test C or below 90 on Math Test D portions of the CGP indicates that the student has difficulty in understanding and computing with fractions,

decimals, and/or percents. In all these instances it is presumed that remedying these deficiencies would be appropriate and is necessary for success in most college level course work.

Typically, as many as 60 percent of all entering students test below these standards placing them in the Guided Studied program. The enrollment options of these students are restricted to developmental education classes and a few selected courses, identified by the faculty, as appropriate for students with some or all identified academic deficiencies. Successful completion of the prescribed remedial courses allows the student to move into regular status.

Methodology

For the last four years, the institution has been tracking the original 563 first-time enrolled, full-time students, who were placed in the Guided Studies program in the fall of 1984 (Walleri, 1987). Based on a comparison with a similar group of academically deficient students entering prior to implementation of the Guided Studies program, the two-year persistence rate of the fall 1984 group increased by 8 percent. For some sub-groups (e.g., vocational majors) the persistence rate increased as much as 15 percent. Of the fall 1984 students, approximately 60 percent successfully completed their developmental course work; about 40 percent of those required two or more terms.

During 1986-87, a follow-up survey was conducted on this original group to evaluate their experience in the Guided Studies program, rate their satisfaction with the institution and its staff, and assess, from their perspective, attainment of personal and academic goals. Approximately one quarter of the original 563 students responded. A key finding from this survey, despite the generally successful findings reported above, is that less

than half of the respondents indicated that they had achieved their personal and academic goals. Analysis of student records and the survey results did not clearly identify factors associated with student success or failure. Thus, a decision was made to conduct in-person structured interviews.

The sample of respondents to the 1986-87 survey was divided into four sub-categories, based on a combination of college-defined and student-defined success criteria. Group 1: students who were identified as successful by the college's Standard of Academic Progress (a cumulative GPA of 2.00 or greater) and whose self-report indicated personal and academic success. Group 2: students who were unsuccessful by institutional standards (less than a cumulative 2.00 GPA) and whose self-report indicated a lack of personal and academic success. Group 3: students who were successful by institutional standards but whose self-report indicated lack of academic and personal success. Group 4: those who were unsuccessful by institutional standards but who experienced, from their perspective, academic and personal success. College-defined student success in terms of GPA is somewhat imprecise and arbitrary. However, alternatives, such as degree completion, are even less relevant to the students in question. Further, the GPA criteria is communicated to the students as the college's Standard of Academic Progress.

A sample of 20 students, five from each of the four sub-categories, was randomly selected to participate in a personal interview session to further identify and define the variables associated with student success. The in-person survey instrument was adapted from Kinnick, Westine, and Kempner (1987). Prior to the actual interview each participant was asked to complete a questionnaire addressing aspects of academic and social integration (adapted, in part, from Pascarella and Terenzini, 1980). Because of the stated

hypothesis, we are particularly interested in personal associations (such as a counselor or faculty member) which would account for those students who were successful. (Copies of both instruments used in this study are available from the authors.)

The questions included in the interview were constructed in order to learn more about the students' experiences while enrolled at MHCC and the relationship of these experiences to their relative success or failure in obtaining personal and academic goals. Interview participants were asked questions about their employment patterns, income levels, parents occupations, siblings educational attainments, and also about their satisfaction with high school curriculums in regard to preparation for post-secondary work.

Results

Table 1 offers a summary of the four categories of students, the total number of students in each group from the 1986-87 follow-up survey, and the sample of students participating in the in-person interviews. Approximately 75 percent of the pool of students from which the survey sample was drawn tended to concur with success as defined by the college. Nonetheless, for a significant minority, success as determined by the students differed from that of the college. The four groups interviewed are not of equal size due to the small number of students in group #4, and to the difficulty in arranging interviews.

Table 2 reports on selected characteristics of the students interviewed for this study (N=20). The major finding here is the similarity between the most successful and least successful students (groups #1 and #2) in terms of age and declared student major (primarily vocational). It is often noted that older students tend to be more successful than younger students due to the fact

TABLE 1. Categories and Sample Size for In-Person Surveys with High Risk Students

	College Defined Success	Student Defined Success	N	Sample Interviewed
#1	Yes	Yes	83	7
#2	No	No	44	5
#3	Yes	No	37	5
#4	No	Yes	9	3
TOTAL			173	20

TABLE 2. Selected Characteristics of Sample Interviewed (N=20)

	Group #1	#2	#3	#4
Sex - Male	3	2	3	1
Female	4	3	2	2
Age - Fall 1984				
21 or less	2	1	4	3
22 or more	5	4	1	0
Major - Vocational	6	4	2	0
Transfer	0	0	2	2
General Studies	1	1	1	1
Quarters of Continuous Attendance (from fall 1984)				
One		2		2
Two				
Three		1	2	1
Four	3	2		
Five			1	
Six or more	4		2	

that they are often more mature, have a higher degree of goal specificity, and are more highly motivated. It is less often acknowledged that older students have just the opposite attributes, as suggested by the higher attrition rate in group #2. The data on student declared major is less significant than students' commitment to a specific field, as will be discussed below.

The study found strong evidence in support of Tinto's model which purports, in part, that experiences which promote social and academic integration into the college community contribute to behavioral and attitudinal elements of success. Those students who were defined successful, by both institutional and self-reported standards, had significant attributes in common. They all reported a close personal relationship with at least one faculty member. Further, these students were satisfied with access to, and the service received from, the college's counseling center. These students tended to have shared values with their classmates and more than half reported satisfying relationships with other students. All of these students felt their instructors were genuinely interested in teaching and that their non-classroom contact with faculty members was a positive factor in their academic and career growth. They rated the willingness of instructors to be available to students as a significant factor in their success equation. This particular group did <u>not</u> change their major, had identified clear occupational goals, and five of the seven students are currently employed in a field directly related to their educational program.

Five of the seven students in group #1 indicated that their academic goal was a two-year degree, and two of the five achieved that goal. All but one of the students in this group reported that they had achieved or partly achieved their academic goal. All seven students reported that they had reached or made

progress on their personal goal (either same as academic goal or job-related). Thus, although most of these students did not obtain the degree, both in terms of outcomes and their own perceptions, significant progress was made in terms of educational and career goals.

The presence of specific career goals for the successful group is a variable that has a positive relationship to student success (Beal and Noel, 1980). Super and others (1963) argue that if a definite vocational goal is not identified students are more likely to leave. This position is borne out by the finding that almost all of the students in the other three groups changed their major while at the college and had indefinite career plans. Apparently students who have not identified career options may be frustrated and may have little, if any, committment to college.

Career indecision was a key factor for students in group #2 (non-successful, both by self-report and by college standards). These students reported a lack of positive relationships with other students, faculty and counselors. These students had especially negative feelings toward their instructors.

Another significant report was made by those in group #3 (college success, but not personal success), relating to their frustration over not having a clear educational or career objective. All of the students in group #3 indicated that they were planning on more education; therefore, the initial educational experience did not lead to goal attainment. As their career choice does become clear, they feel positive enough about the institution to return. Although not to the same degree as the students in group #1, these students did achieve a similar level of academic and social integration. As described in Table 2, this group came the closest to matching the persistence rate of students in group #1. Their self-reported non-success was directly related to

the high value placed on obtaining a two or four-year degree.

The most interesting and surprising results came from the students in group #4 (unsuccessful by college standards, but self-reported personal success). Perhaps clarifying that college was not the most appropriate place for them to be, was in and of itself a "success" experience. These students were similar to those in group #3 in that they generally reported positive relationships with faculty, counselors, and fellow students. In opposition to students in group #3, however, they placed very low priority on academic success in general and degree completion in particular. Their primary, and perhaps only, reason for attending college was related to their occupational goal. These students' self-reported personal success was based on the fact that all three students had obtained a satisfying job, even though unrelated to their college studies.

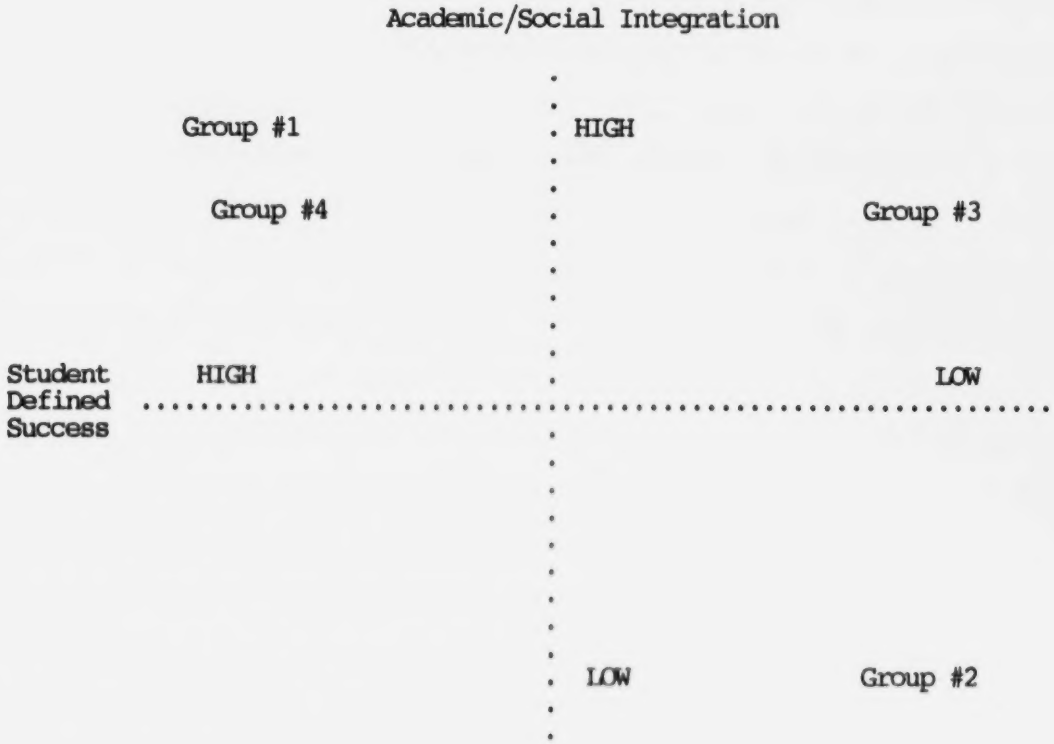
Figure 1 summarizes the above discussion in terms of the relationship between student-defined success and academic/social integration. The students in group #1 were successful by both college and self-reported standards and also reported the highest degree of academic and social integration. The students in groups #3 and #4 also reported a moderate to high degree of academic and social integration. The students in group #3 were successful by the college's GPA standard, but indicated a lack of personal success because of the high value accorded to degree completion. The students in group #4, even though unsuccessful by institutional standards, reported personal success due to their ability to find satisfying employment combined with the relatively low value placed on academic success. The students in group #2 were unsuccessful by both institutional and self-reported standards and achieved the lowest level of academic and social integration. The students in groups #1 and #2 are

classic examples of Tinto's formulation. The students in groups #3 and #4 are more difficult to evaluate in terms of academic and social integration due to their vastly different personal value systems. A key finding in terms of the methodology employed here is that this complexity and variability only emerged from the case studies rather than the previous quantitative analysis.

Implications

Although the findings reported here are consistent with Tinto's model, they are inconsistent with recent research on non-traditional students and community college students in particular. This research reports an independent relationship between persistence and academic/social integration. The case study approach used here, as oppossed to the aggregate quantitative methodology used in previous studies, certainly is one factor explaining the differing results. Further, whereas the previously cited research focused on the larger student population, this study is restricted to academically underprepared students. That is, academic and social integration may play a more critical role for poorly prepared students than those who enter with better preparation. More importantly, however, the use of student intentions and self-reported success as an outcomes measurement tool helped in evaluating and explaining the observed outcomes, especially with regard to groups #3 and #4. The findings suggest that academic and social integration are important predictors of student persistence for certain segments of the non-traditional student population, but less important for other segments. Academic and social integration have a strong influence on student persistence when the students have definite goals and share values with the institution.

FIG. 1. Spacial Depiction of Case Study Results with Regard to Student Defined Success and Academic/Social Integration



All things considered, perhaps it is the feeling of acceptance, despite prior or current academic performance, and the reinforcement of one's possible potential that is so critical to this academically underprepared population. Community colleges recognize that a large portion of their student clientele is indeed not prepared for post-secondary level work. Many community college students have received little, if any, encouragement to continue with educational pursuits. Thus, initial institutional and educational goal commitments, which have been found to be extremely significant determinants of educational outcomes, are not significantly present in this high risk population.

If students perceive that counselors, faculty and staff members are genuinely interested in their academic and career goals, they will be more committed to the institution. An intrusive approach, such as Guided Studies, clearly displays to the student that he/she is of special interest to the institution, while at the same time maintaining the institution's commitment to access and opportunity along with excellence and accountability.

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